House Committee on Government Reform

Statement of Janet M. Marchibroda, Chief Executive Officer, eHealth Initiative and Foundation
Testimony Before the House Committee on Government Reform
on
The State of Information Technology and Health Information Sharing and the Progress and Challenges in Developing a National Information Technology Strategy

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Introduction
Chairman Davis, Congressman Waxman, distinguished members of the Committee, I am honored to be here today to testify before you on the following:

- The state of information technology and health information sharing;
- The progress and challenges related to developing a national information technology (IT) strategy;
- The exploration of efforts to develop standards for the collection and use of health information to facilitate information sharing, and
- The challenges to achieving interoperability among health IT systems.

My name is Janet Marchibroda. I am testifying today on behalf of the eHealth Initiative and its Foundation. I serve as the Chief Executive Officer of both organizations, which are independent, national, non-profit organizations whose missions are the same: to improve the quality, safety and efficiency of health and healthcare through information and information technology. Both convene multiple stakeholders, including clinicians, consumer and patient groups, employers and purchasers, health plans, healthcare IT suppliers, hospitals and other providers, laboratories, pharmaceutical and medical device manufacturers, pharmacies, public health agencies and representatives of the public sector to reach agreement on and stimulate the adoption of common principles and strategies for accelerating the use of information to support health and healthcare. In addition, it is important to note, that through the eHealth Initiative Foundation, we have built a coalition of almost 1,000 stakeholders involved in over 150 regional and community-based initaitives across America, located in nearly 50 states and the District of Columbia, who are working together to mobilize information within their markets to support health and healthcare.

In my remarks today, I will share the insights of the multiple and diverse stakeholders engaged in our work, as well as findings from our recent survey of 109 communities within the United States who are mobilizing information to support patient care through health information exchange activities.

Current State of Information Technology and Health Information Sharing in Communities Across the U.S.
Despite the recent increase in interest and momentum around the value of information technology in addressing quality, safety and efficiency challenges in our healthcare system, current penetration rates continue to be low—particularly in physician practices, where most of

America's healthcare is delivered. According to a 2003 national survey from the Commonwealth Fund, only 27 percent of physicians are using electronic health records (EHRs), with small physician practices demonstrating the lowest adoption rates. According to the study, 57 percent of practices with more than fifty physicians are using an EHR, compared to only 13 percent for solo practitioners.[1] This statistic is particularly important given that most of America's healthcare is delivered by small physician practices. According to the 2002 National Ambulatory Medical Care Survey, 68 percent of the almost 900 million physician practice visits in the U.S. are conducted by practices with one to four doctors.[2]

While installing EHRs can address some healthcare challenges, the real value—in terms of improving quality, saving lives, and reducing costs—comes from the mobilization of data across systems. Connectivity is required to avoid redundant tests; improve safety and coordination among providers; increase administrative efficiency; and improve consumers' compliance with prevention, disease management, and care guidelines.[3] In fact, most of the information that a clinician uses at the point of care comes from somewhere else—such as the hospital, the laboratory, the pharmacy, and the health plan.

Currently, the U.S. healthcare system is highly fragmented and paper-based, and information about the patient is stored in a variety of locations and formats. As a result, clinicians often don't have comprehensive information about the patient when and where it is needed most—at the point of care. Those responsible for improving population health don't have the information they need to measure progress and facilitate improvement. To address the need for health information mobilization, a number of collaborative organizations involving multiple stakeholders are emerging to develop and implement "health information exchange" capabilities, and the policies and processes to support their ongoing operations.

"Health information exchange" is defined as the mobilization of healthcare information electronically across organizations and disparate information systems within a region or community. Health information exchange initiatives are designed to support interoperability and facilitate access to and retrieval of clinical data, privately and securely, to provide safer, more timely, efficient, effective, equitable, patient-centered care.[4]

A number of reports highlight the value and cost savings of standards-based health information exchange. According to a recent study by the Center for Information Technology Leadership, net savings from the national implementation of fully standardized interoperability between providers and five other types of organizations could yield $77.8[5] billion annually, or

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[1] A.M. Audet et al., "Information Technologies: When Will They Make It into Physicians' Black Bags?" Medscape General Medicine 6, no. 4 (2004), www.medscape.com/viewarticle/493210 (14 February 2005); (registration required).
[2] 2002 National Ambulatory Medical Care Survey: 2002 Summary, contained in the CDC's Advance Data No. 346, dated August 26, 2004.
[3] R. Taylor et al., "Promoting Health Information Technology: Is There a Case for More Aggressive Government Action?", Health Affairs 24, no. 5 (2005): 1237.
[4] Emerging Trends and Issues in Health Information Exchange: Selected Findings from eHealth Initiative Foundation's Second Annual Survey of State, Regional and Community-Based Health Information Exchange Initiatives and Organizations, August 2005
[5] Walker J, Pan E, Johnson D, Walker J, Adler-Milstein J, Bates DW, Middleton B: The Value of Healthcare Information Exchange and Interoperability: There is a Business Case for Spending Money on a Fully Standardized Nationwide System. Health Affairs: Web Exclusive, January 19, 2005.

approximately five percent of the projected $1.7 trillion spent on healthcare in 2003. According to the report, full national implementation at "level four" interoperability, in which all systems would exchange data using the same messaging, format and content standards, would reap the following net returns annually for stakeholders: providers, $33.5 billion, payers, $21.6 billion, independent laboratories, $13.1 billion, radiology centers, $8.17 billion, pharmacies, $1.29 billion, and public health departments, $94 million[6]. A recent report conducted by the RAND Corporation estimates that effective electronic medical record implementation and networking could eventually save more than $81 billion annually—by improving healthcare efficiency and safety—and that HIT-enabled prevention and management of chronic disease could eventually double those savings while increasing health and other social benefits.[7]

eHealth Initiative's Foundation recently conducted its second annual survey of state, regional and community-based health information exchange efforts, releasing its results on August 29, 2005. This work, supported both this year and last year by the Health Resources and Services Administration's Office of the Advancement for Telehealth (HRSA/OAT) within the Department of Health and Human Services, will serve as a yearly "report card" on the current state of activities related to interoperability and health information exchange across the U.S., highlighting for both policy-makers and on-the-ground implementers the barriers and strategies currently being utilized by collaborative efforts in almost every state in the nation.

Survey results indicate a dramatic increase in the level of interest in and activity related to mobilizing information electronically across markets to support health and healthcare. Results show that a number of new health information exchange initiatives have emerged over the last year, and in general, such efforts have matured considerably with respect to engagement of key stakeholders, organization and governance, the range of functionality provided, and the technical aspects of health information exchange. These initiatives typically involve a broad range of participants, including hospitals and other healthcare providers, physician practices, health plans, employers and other healthcare purchasers, laboratories, pharmacies, public health agencies, state and local governmental agencies, and most importantly, patients. Among the 109 health information exchange efforts identified by the 2005 survey, there is clear evidence of rapid maturation and movement along six distinct developmental stages, with 40 respondents in the "implementation" phase and 25 "fully operational"—up from the nine efforts considered fully operational in 2004[8].

The key driver moving states, regions and communities toward health information exchange is perceived provider inefficiencies. Seventy-seven percent of all respondents cited "provider inefficiencies due to lack of data to support patient care" as a significant driver for their health information exchange efforts, with 99 percent of all respondents citing this as a significant or moderate driver for their efforts. Additionally, rising healthcare costs was a significant driver for

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[6] Pan E, Johnson D, Walker J, Adler-Milstein J, Bates DW, Middleton B: The Value of Healthcare Information Exchange and Interoperability. Center for Information Technology Leadership. 2004.

[7] R Hillestad et al. "Can Electronic Medical Record Systems Transform Health Care? Potential Health Benefits, Savings and Costs", Health Affairs 24, no. 5 (2005): 1103

[8] Overhage J, Evans L, Marchibroda J: Communities' Readiness for Health Information Exchange: The National Landscape in 2004. *JAMIA* 12:107-112, 2005.

both early stage and advanced stage health information exchange efforts, with 60 percent of respondents citing this as a significant driver.

The Progresses and Challenges of Developing a National Health Information Technology Strategy

eHealth Initiative's work with the multitude of stakeholders in healthcare as well as the hundreds of stakeholders involved in state, regional and community-based efforts across the U.S. reveal the following primary policy barriers that impede widespread HIT adoption and health information exchange: the misalignment of incentives and lack of a sustainable business model for HIT and health information exchange investment and the need for standards adoption and interoperability.

Misalignment of Incentives and Lack of a Sustainable Business Model

Physician practices currently face a significant financial hurdle when exploring the purchase of an EHR system. Costs may be significant and the implementation process can be complex and costly, taking precious time away from taking care of patients. One study indicates that while physicians must make the investment in EHR systems, they accrue only 11 percent of the benefit.[9]

eHealth Initiative Foundation's 2005 survey indicates that while health information exchange initiatives are maturing and increasingly exchanging a range of health care information to support care delivery and performance improvement, one of the key challenges for most efforts is the development of a business model for sustainability. Thirty-one percent of all survey respondents cited "developing a sustainable business model" as a very difficult challenge and 84 percent cited this barrier as either a very difficult or moderately difficult challenge. Similarly, 91 percent cited "securing upfront funding" as a very difficult or moderately difficult challenge, which relates significantly to the lack of a sustainable model[10].

The difficulties faced in securing funding for upfront development costs and achieving sustainability for ongoing operational costs for health information exchange stem in part from fundamental problems with our nation's prevailing reimbursement methods which reward the volume of services delivered instead of either the outcomes or processes that would result in higher quality, safer, more efficient, or more effective healthcare. Progress is being made in this area through leadership demonstrated by several members of Congress through recently introduced legislation related to "value-based purchasing"; the Centers for Medicare and Medicaid Services' leadership and efforts in demonstration projects such as the Medicare Health Care Quality Demonstration (Section 646 of the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 or MMA), the Medicare Care Management Performance Demonstration (Section 649 of the MMA) and related DOQ-IT Program; and private sector initiatives such as Bridges to Excellence—a non-profit organization representing purchasers,

[9] J. Walker et al., "The Value of Health Information Exchange and Interoperability," Health Affairs, no. 19, January 2005.

[10] Emerging Trends and Issues in Health Information Exchange: Selected Findings from eHealth Initiative Foundation's Second Annual Survey of State, Regional and Community-Based Health Information Exchange Initiatives and Organizations, August 2005

providers and payers which has developed and is implementing programs designed to promote quality and safety through rewards to physician practices and patients. All of these efforts acknowledge the misalignment of incentives and the economic imbalance that exists between those who purchase HIT and those who benefit from its use.

The eHealth Initiative Foundation has taken steps to tackle this issue by engaging purchasers, providers and payers in the development of a set of principles and framework for aligning incentives with not only quality and efficiency goals, but also HIT capabilities within the physician practice and health information exchange capabilities across markets in the U.S. This Framework, entitled "Parallel Pathways for Quality Healthcare[11]," offers significant guidance to states, regions and communities who are exploring health information exchange as a foundation to address quality, safety and efficiency challenges. As policies and practices that align payment systems with quality and efficiency become more prevalent, health information exchange efforts will have an easier time securing the funding required to support their start-up and sustainability.

The eHealth Initiative Foundation, through its Connecting Communities for Better Health Program, this year funded by HRSA/OAT, will provide seed funding and technical support to a set of "learning laboratories" led by multi-stakeholder collaboratives, who are experimenting with the development of models for sustainability for their health information exchange efforts. We expect to gain knowledge and experience related to principles and strategies for sustainability to support not only those who receive awards, but all communities across the U.S. who are developing health information exchange capabilities. We also expect that lessons learned and shared from these learning laboratories will inform the efforts of policy-makers, and national leaders both in the public and private sectors who must take actions to clear barriers to interoperability and health information mobility.

This year's award program is designed to be a catalyst to build purchaser and payer awareness of the value that health information exchange capabilities can provide and stimulate their ongoing interest in supporting such activities at the state, regional and local levels. Successful awardees will have engaged the commitment of purchasers and payers representing at least 30 percent of covered lives within their markets, to participate in a pilot or implementation of an incentives program that will not only support quality goals, but also directly or indirectly, support the health information exchange capabilities which are necessary to achieve those quality goals. They will also have engaged the commitment of a large percentage of practicing clinicians--including small physician practices--who have committed to both utilizing the health information exchange capabilities, and participating in the incentives program.

Standards and Interoperability

The Administration, a number of members of Congress, some states, and several private sector efforts have introduced policies and initiatives designed to improve the quality, safety and efficiency of healthcare by addressing the issues of standards and interoperability. The Administration signaled its commitment to interoperability and the mobilization of information electronically across our healthcare system when President George W. Bush appointed David Brailer, MD, PhD as National Coordinator of Health Information Technology. Department of

[11] eHealth Initiative Foundation's Parallel Pathways for Quality Healthcare: A Framework for Aligning Incentives with Quality and Health Information Technology, May 2005

Health and Human Services Secretary Michael Leavitt's June 2005 announcement of the creation of a private-public sector collaboration—the American Health Information Community (AHIC)--and four related Requests for Proposals to fast-forward work related to privacy and security, standards harmonization, certification, and architecture, all will help pave the way for health information exchange and interoperability.

Many other influential groups have made great strides in both the development and adoption of standards to support a higher quality, safer and more efficient healthcare system enabled by information technology. Within government, the Consolidated Health Informatics Initiative has played an integral role in gaining consensus on the data standards that the Federal government will use in its own operations. The National Committee on Vital and Health Statistics has played a critical role by providing ongoing advice and counsel to the Secretary of the Department of Health and Human Services regarding the standards that should be adopted to promote an interoperable, electronic healthcare system.

Connecting for Health, a public-private sector collaborative funded by the Markle and Robert Wood Johnson Foundations, is developing a number of work products designed to support interoperability, including technical prototypes for a health information network in three markets, which will provide considerable input and support the interoperability movement across the U.S.

In addition to the significant announcements outlined above, the Administration has several programs underway to conduct research, gain consensus on technical standards and practices, conduct demonstration programs, fund grants and contracts, and provide education and technical assistance to stakeholders to support the improvement of health and healthcare through HIT. These programs are under the auspices of the Office of the National Coordinator for Health Information Technology, the Agency for Healthcare Research and Quality, the Centers for Disease Control and Prevention, the Centers for Medicare and Medicaid Services, the Department of Defense, the Health Resources and Services Administration, the National Institutes of Health, and the Veterans Administration.

Congress is also playing a significant leadership role in promoting interoperability and standards adoption. Bi-partisan support has accelerated with the introduction of several pieces of legislation. In June and July 2005, five bills were introduced in the House and Senate that included components related to HIT. A number of the bills introduced in 2005 call for the funding and implementation of regional health information networks to support the national implementation of widespread interoperability.

National efforts designed to achieve consensus on and promote the adoption of standards could not be more timely. Health information exchange initiatives are in the midst of engaging in the difficult work related to getting organized; engaging stakeholders; defining goals, objectives, and priorities; and developing sustainable business models. As this work continues to migrate towards the implementation of technical networks, leadership on both the development of new and communication of the many existing standards at the national level will be critical to enable interoperability across markets.

Exploring Efforts to Develop Standards for the Collection and Use of Health Information Sharing

As noted above, many, many stakeholders benefit from the use of HIT and health information exchange. These efforts enable clinicians to gain more information about the patient and evidence-based practices--at the point of care—where it is needed most; public health agencies to receive necessary information to support and protect the population's health; and purchasers and payers the information they need to support efforts to drive improvements in quality, safety and effectiveness.

Currently, there is a great deal of momentum around two parallel issues: the use of health information technology and the importance of driving accountability and transparency. As noted above, reports from a wide range of philanthropic and private sector organizations, as well as representatives from the public sector both within the Administration and Congress, recognize the value of HIT in addressing quality, safety and efficiency challenges in the U.S. healthcare system. At the same time, the development and implementation of incentives or "value-based purchasing" programs—also called "pay for performance" programs--is on the rise, stimulated by reports from the Institute of Medicine and leadership demonstrated by organizations such as the Leapfrog Group, Bridges to Excellence, the Integrated Healthcare Association, and the Centers for Medicare and Medicaid Services, as well as several other programs initiated by both payers and purchasers. According to one report, almost one-third of health plans say that they now have a pay-for-performance program in place, but most are in the earliest stages of development or implementation.

Pay-for-performance systems provide higher reimbursement for those who perform well on a wide variety of quality, cost and efficiency measures (which are both process and outcome-oriented). Many of these systems have been launched based on the recognition that current reimbursement methods are not effectively curbing both rising healthcare costs and addressing issues related to quality and safety. Many, but not all, of the emerging programs integrate information technology expectations, recognizing that information technology can not only help with the reporting of the quality data typically required for such programs, but can also assist with the achievement of better outcomes—in both quality and efficiency.

It is important to note that most incentive programs in place today use claims-based information and manual patient record abstraction as the means to determine the quality of care received by patients. There are well researched and documented shortcomings to the use of claims data to determine the quality of care delivered, including the lack of timeliness, in some cases, its inaccuracy, and the lack of its ability to provide important physiological data on patients that are the true markers of clinical outcomes. In addition, manual extraction of data from paper-based charts is time-consuming and expensive. And, according to some reports, charts for patients cannot always be located. The use of clinical applications and health information exchange dramatically increase the accuracy, timeliness, and availability of information to support the determination of quality of care by purchasers and payers administering performance-based incentive programs. The development of this infrastructure—through health information exchange efforts--also builds the foundation for an evolving set of expectations without building in additional reporting burden.

Finally--and more importantly—the use of clinical applications and the mobilization of patient data through health information exchange also creates the foundation and infrastructure for quality and safety improvement by supporting the provision of important patient information at the point of care—where it is needed most--and enabling clinicians to improve the quality and safety of care as it is being delivered to patients.

To address the challenges outlined above, and to provide support to emerging health information exchange efforts, the eHealth Initiative Foundation is developing tools and resources designed to support the diverse stakeholders in markets leverage health information exchange capabilities to facilitate the transmission of data and measures to support quality improvement and performance measurement, including common principles, policies and "how to" guides for physician practices and health information exchange efforts transmitting performance measures. We will also test the effectiveness of these guides in a number of "learning laboratories" in markets across the U.S. It is interesting to note, that according to our 2005 survey, a number of health information exchange efforts are already beginning to provide services that will support improvement, with 32 percent of advanced stage health information exchange initiatives providing disease or chronic care management services and 27 percent supporting quality and performance reporting efforts.

The Office of Personnel Management (OPM), through its Federal Employees Health Benefits (FEHB) Program, has an enormous opportunity to effect change in our healthcare system, given that about eight million Federal employees, retirees and their dependents are covered by the Program. The Program allows OPM to offer competitive health benefits products for Federal workers much like large employer purchasers in the private sector. OPM administers the Program by contracting with private sector health plans.

During its testimony to the House Subcommittee on the Federal Workforce and Agency Organization Committee on Government Reform on July 27, 2005, OPM laid out the various options to provide incentives in the FEHB Program to promote the adoption of interoperable HIT, including the following:

- Encourage plans to link disease management and quality initiatives to HIT systems for measurable improvements.

- Encourage health plans to provide incentives for the adoption of interoperable health information technology systems by key providers under FEHB contracts.

- Consider basing part of the service charge, or profit, for fee-for-service and other experience-rated plans and consider introducing performance goals for health maintenance organizations (community-rated plans) that are linked to their developing incentives for doctors and pharmacies to use paperless systems to fill prescriptions; contracting with hospitals that use electronic registries, electronic records, and/or ePrescribing; and increasing the number of enrollees whose providers use electronic registries, electronic records, and/or ePrescribing.

- Introduce incentives and performance goals for plans that integrate their provider networks with local and national health information infrastructure initiatives.

- Encourage and reward carriers that contract with pharmacy benefit managers which are providing incentives for ePrescribing and health information technology linkage.

OPM stated its commitment to using its position as the largest purchaser of employee healthcare benefits to contribute in the expansion and use of electronic health records, e-prescribing and other HIT related provisions and should be commended and supported in its leadership.

Conclusion

In conclusion, we offer a summary of key points related to the use of HIT and health information exchange to support improvements in the quality, safety and efficiency of our nation's healthcare system.

- Without the alignment of financial and other incentives with both quality and efficiency goals as well as electronic health information exchange capabilities, efforts to accelerate the mobilization of information to support patient care will continue to move at a slow pace. The combined purchasing power of the Office of Personnel Management's Federal Employees Health Benefits Program and the Centers for Medicare and Medicaid Services can play a critical role in catalyzing and change across the entire healthcare system. Given its jurisdiction over FEHBP, this Committee may want to consider a demonstration project related to supporting health plans to improve the quality, safety and efficiency of healthcare through IT.

- Innovative programs designed to facilitate public and private sector seed funding of emerging health information exchange efforts must be developed and implemented if goals related to widespread interoperability are to be achieved. While federal efforts can play a critical role in addressing this challenge, they should be designed to stimulate investment by the private sector as well as state and local government agencies to facilitate widespread interoperability.

- National efforts designed to achieve consensus on and promote the adoption of standards are on target and could not be more timely. They should continue to recognize the importance of public-private sector partnership, leverage the work that has already been conducted in the field, and tackle the issues for which we have not yet developed consensus within our fragmented healthcare system. Health information exchange initiatives are in the midst of engaging in the difficult work related to getting organized; engaging stakeholders; defining goals, objectives, and priorities; and developing sustainable business models. As this work continues to migrate towards the implementation of technical networks, leadership on both the development of new and communication of the many existing standards at the national level will be critical to enable interoperability across markets.

We are at a unique point in time, where public and private sector interests are at an all-time high in two key areas: improving the quality and safety of healthcare and moving forward on a health

information technology agenda. Approaching these two key issue areas in a siloed manner--without strong integration across both areas--will result in missed opportunities, unintended consequences, and possibly reduced impact in both areas. Implementing an integrated, incremental strategy, which incorporates goals related to quality, safety, and efficiency as well as health information technology and the mobilization of data across organizations offers the foundation for building a healthcare system that is safer, of higher quality, and more effective and efficient.

Chairman Davis, Congressman Waxman, distinguished members of the Committee, thank you again for inviting me to discuss our perspectives on the role of information technology and health information sharing in improving the quality, safety and efficiency of our nation's healthcare system and the progress and challenges related to developing a national IT strategy. We at the eHealth Initiative are committed to working with you, as well as both the public and private sectors to make our vision of an improved healthcare system enabled by information technology and information mobility a reality. We commend you and your Committee for the work that you have done to improve the quality, safety and efficiency of healthcare for patients through information technology. Again, thank you for this opportunity and I look forward to answering any questions you may have.